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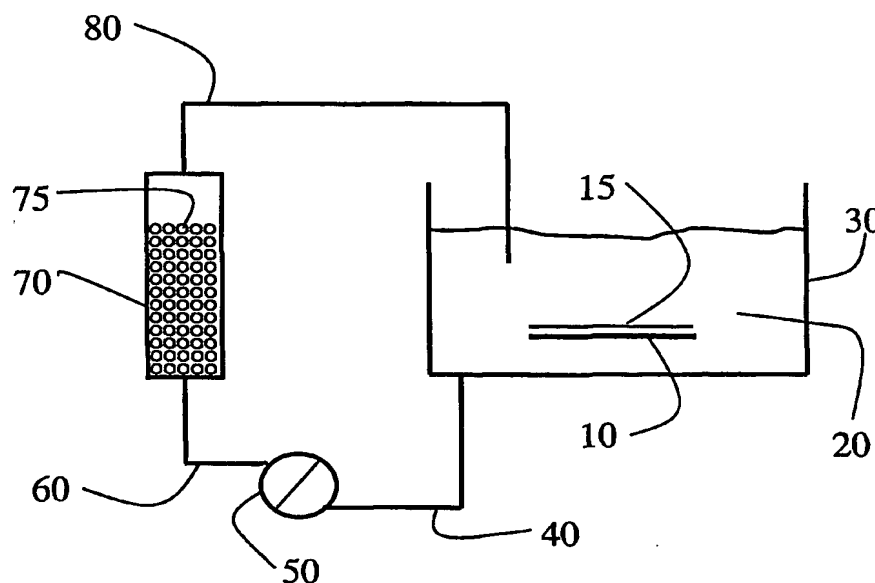
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(54) Title: METHOD FOR LOW TEMPERATURE GROWTH OF INORGANIC MATERIALS FROM SOLUTION USING CATALYZED GROWTH AND RE-GROWTH



(57) Abstract: The present invention involves a method and apparatus for depositing a silicon oxide onto a substrate from solution at low temperatures in a manner that produces homogeneous growth of the silicon oxide. The method generally comprises the following steps: (a) Chemically treating a substrate to activate it for growth of the silicon oxide. (b) Immersing the treated substrate into a bath with a reactive solution. (c) Regenerating the reactive solution to allow for continued growth of the silicon oxide. In another embodiment of the present invention, the apparatus includes a first container holding a reactive solution, a substrate on which the silicon oxide is deposited, a second container holding silica, and a means for adding silica to the reactive solution.

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